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ARIMETCO (1993)

MINERALS PROCESSING AND ENVIRONMENTAL LABORATORIES, INC.

NDEP
METEORIC MOBILITY TEST

FOR

Arimetco Inc./Copper Tex Corporation
102 Burch Drive
Yerington, NV 89447

Attn: Mr. Bill Sifford

LABORATORY NUMBER F228-02
INVOICE NUMBER F0783

September 18, 1991

SAMPLE I.D.: VLT

SUMMARY

A 24 hour column leach test was conducted on 4989.9 grams of material identified as VLT. Reagent grade water adjusted to synthetic meteoric water nitric acid at pH 5.70 was circulated through the column at a rate of liters per hour. The resulting effluent was collected and analyzed for ending pH, Alkalinity, Sulfate, Nitrate, Chloride, Fluoride, W.A.D. Cyanide,

and 32 inorganic elements.

NDEP METEORIC WATER MOBILITY TEST
LABORATORY NUMBER F228-02
INVOICE NUMBER F0783

SAMPLE I.D.: VLT

TEST PROCEDURE

Material, all passing 2 inches identified by the client as VLT was air dried and split to obtain a test sample of 4989.8 grams. The sample was placed in an 8 inch column for extraction by an artificial lixiviant of pH 5.70 made from reagent grade water and nitric acid. A solution application rate of .41 liters per hour was used to circulate 10,000 milliliters of the lixiviant through the material. Solution recovery at 24 hours was 90% with a saturation volume of 500 ml's. The recovered solution was preserved for testing as required for each type of analysis to be conducted.

A separate split of the test material was wet screened to obtain the percentage of material passing a 200 mesh U.S. standard screen. Test results are tabulated as follows:

le: VLT
.c Sample Weight: 4989.9 grams
Solution Volume applied: 10,000 milliliters
Initial pH: 5.70 Lixiviant
Final pH: 3.58 Effluent
Leach Time: 24 hours Leach Method: Column
Saturation Volume: 500 milliliters
Percent material passing 200 mesh: 6.6%

			METHOD
Alkalinity:			EPA 310.0
Bicarbonate	0	mg/l	
Total	0	mg/l	
Sulfate:	1970	mg/l	EPA 375.4
Chloride:	3.59	mg/l	EPA 325.3
Nitrate:	-0.5	mg/l	EPA 350.3
Fluoride:	-0.05	mg/l	EPA 340.2
TDS:	2,533	mg/l	EPA 160.2
W.A.D. Cyanide:	-0.02	mg/l	ASTM D2036-89

EP METEORIC WATER MOBILITY TEST
LABORATORY NUMBER
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VENT SAMPLE

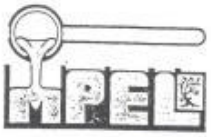
Element	mg/l	Element	mg/l	Element	mg/l
Aluminum	11.0	Gallium	-0.050	Scandium	0.008
Antimony	-0.025	Iron	0.414	Selenium	-0.005
Arsenic	0.033	Lead	0.076	Silver	-0.025
Barium	0.053	Lithium	0.017	Sodium	9.61
Beryllium	0.002	Magnesium	441.8	Strontium	1.97
Bismuth	48.0	Manganese	0.780	Thallium	-0.040
Cadmium	-0.005	Mercury	-0.001	Tin	-0.080
Calcium	721	Molybdenum	0.083	Titanium	-0.050
Chromium	-0.025	Nickel	0.118	Vanadium	-0.008
Cobalt	0.115	Phosphorus	0.030	Zinc	0.623
Copper	408	Potassium	15.4		

EPA METHOD: 200 SERIES

*Note: Static Test on this sample to follow on Laboratory Number F228-02A, Invoice Number F0783A.

Respectfully Submitted

Wayne M. Colwell
General Manager



MINERALS PROCESSING AND ENVIRONMENTAL LABORATORIES, INC.

STATIC TEST

FOR

Arimetco Inc.
102 Burch Drive
Yerington, NV 89447

October 2, 1991

Sample I.D.: VLT		
		Units of Measure
Total Sulfur (as S)	0.08	%
Pyritic Sulfur (as S)	0.01	%
Sulfur, Unidentified (as S)	-0.01	%
Sulfate, Sulfur (%)	0.08	%
APP/Peroxide (as S)	-0.01	%
Total Sulfur	2.5	(Tons CaC03/Kt)
Pyritic Sulfur	0.3	(Tons CaC03/Kt)
APP/Peroxide	-0.1	(Tons CaC03/Kt)
Acid Neutralizing Potential	7.5	(Tons CaC03/Kt)

Wayne Colwell

Wayne M. Colwell
:al Manager

MINERALS PROCESSING AND ENVIRONMENTAL LABORATORIES, INC.

NDEP
METEORIC MOBILITY TEST

FOR

Mr. Bill Sifford

Arimetco
102 Burch Drive
Yerington, NV 89447

LABORATORY NUMBER F238-09L
INVOICE NUMBER F0829L

Sample I.D.: Arimetco Clay 8-26-91

September 18, 1991

SUMMARY

14 hour column leach test was conducted on 5,004.0 grams of materi identified as Arimetco Clay. Reagent grade water adjusted to synthet meteoric water with nitric acid at pH 5.62 was circulated through the colu at a rate of .41 liters per hour. The resulting effluent was collected a analyzed for ending pH, Alkalinity, Sulfate, Nitrate, Chloride, Fluorid W.A.D. Cyanide, TDS and 32 inorganic elements.

NDEP METEORIC WATER MOBILITY TEST
\BORATORY NUMBER
VOICE NUMBER

Sample I.D.: Arimetco Clay 8-26-91

TEST PROCEDURE

Material, all passing 2 inches identified by the client as Arimetco Clay was air dried and split to obtain a test sample of 5,004.0 grams. The sample was placed in an 8 inch column for extraction by an artificial lixiviant of pH 5.62 made from reagent grade water and nitric acid. A solution application rate of .41 liters per hour was used to circulate 5,006 milliliters of the lixiviant through the material. Solution recovery at 24 hours was 58% with a saturation volume of 2,100 ml's. The recovered solution was preserved for testing as required for each type of analysis to be conducted.

A separate split of the test material was wet screened to obtain the percentage of material passing a 200 mesh U.S. standard screen. Test results are tabulated as follows:

Sample: Arimetco Clay
Test Sample Weight: 5,004.0 grams
Solution Volume applied: 10,012 milliliters
nitial pH: 5.62 Lixiviant
Final pH: 7.49 Effluent
Leach Time: 24 hours Leach Method: Column
Saturation Volume: 2,100 milliliters
Percent material passing 200 mesh: 12.8%

			METHOD
Alkalinity:			EPA 310.0
Bicarbonate	0.0	mg/l	
Total	3.20	mg/l	
Sulfate:	2,850	mg/l	EPA 375.4
Chloride:	202.43	mg/l	EPA 325.3
Nitrate:	44	mg/l	EPA 350.3
Fluoride:	2.70	mg/l	EPA 340.2
TDS:	4,197	mg/l	EPA 160.2
W.A.D. Cyanide:	-0.02	mg/l	ASTM D2036-89

NDEP METEORIC WATER MOBILITY TEST
'ABORATORY NUMBER
INVOICE NUMBER

Sample I.D.: Arimetco Clay 8-26-91

32 ELEMENT ANALYSIS

Sample I.D.:

Element	ppm	Element	ppm	Element	ppm
Aluminum	0.536	Gallium	0.404	Scandium	0.013
Antimony	-0.025	Iron	0.318	Selenium	0.240
Arsenic	0.081	Lead	0.088	Silver	-0.025
Barium	0.029	Lithium	0.369	Sodium	655.7
Beryllium	0.002	Magnesium	129.0	Strontium	4.531
Bismuth	0.097	Manganese	0.279	Thallium	-0.040
Cadmium	-0.005	Mercury	-0.001	Tin	0.453
Calcium	752.9	Molybdenum	0.370	Titanium	0.005
Chromium	0.042	Nickel	0.056	Vanadium	0.058
Cobalt	0.033	Phosphorus	0.255	Zinc	0.053
Copper	0.177	Potassium	21.39		

EPA METHOD: 200 SERIES

Respectfully Submitted

Wayne Colwell

Wayne M. Colwell
General Manager